CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR DERIVATIVES – INVESTMENT OFFICE May 15, 2000

This Policy is effective immediately upon adoption. No previous Investment Office Derivatives Policy exists.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the development and content of all derivative policy statements for each derivatives application within the California Public Employees' Retirement System ("the System") Investment Office.

II. STRATEGIC OBJECTIVE

Facilitating risk management and providing efficiency in the implementation of investment strategies using derivatives are the strategic objectives of this Policy.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee delegates the responsibility for administering the Policy to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).
- **B.** The **System's Investment Staff** ("the Staff") duties include, but are not limited, to the following:
 - 1. Developing and recommending the Policy to the Investment Committee:
 - 2. Maintaining a procedures manual which is subject to periodic review and updating that outlines staff operational procedures used in implementing this Policy;
 - 3. Implementing and adhering to the Policy; and
 - 4. Reporting immediately to the Investment Committee all violations of the Policy with explanations and recommendations.

C. The **General Pension Consultant** (the "General Pension Consultant") is responsible for evaluating derivatives policy statements to ensure that the necessary issues are addressed.

IV. DEFINITION

A derivative is broadly defined as a financial instrument whose value, usefulness and marketability, is derived from or linked to the value of an underlying security, commodity, or index that represents either direct ownership of an asset or the direct obligation of an issuer, otherwise known as the cash market instrument. For the purpose of this Policy, a narrow definition of a derivative is used. It shall include only the following components:

- A. Futures;
- B. Forwards:
- C. Swaps; and
- D. All forms of options.

Derivatives, as defined in this Policy, shall not be construed to include a broad range of securities, such as Collateralized Mortgage Obligations (CMOS) and convertible bonds.

V. POLICY STATEMENTS

An implementing Derivatives Policy shall be written to cover each derivative application in the System's Investment Office. At a minimum, each implementing Derivatives Policy statement shall address the following:

- A. The purpose of the derivative strategy.
- B. Justification for the use of derivatives.
- C. Description of the risks inherent in the strategy and how they shall be managed. At a minimum, the descriptions shall include pricing risk, liquidity risk, and legal risk.
- D. An appropriate risk analysis and monitoring capabilities for any derivative strategy implemented.
- E. Each Implementing Derivatives Policy shall address the amount of leverage employed under the strategy, the prudent reasons for employing leverage, and the definition of leverage specific to the strategy, shall be consistent with any Investment Office-wide leverage policy.

- F. Acceptable limits on overall exposure to be achieved through derivatives.
- G. Criteria by which the use of counter parties is considered acceptable
- H. Procedures for monitoring and managing the derivative exposure relative to the strategy including protocol for prompt reporting of violations of limits or other policy requirements.
- I. Prohibited uses of derivatives and general restrictions on their use.
- J. The requirement for external managers affirming that they will conform to the System's Derivatives Policy.
- K. Provide for periodic staff review, at least annually, of the policy statement, specifically addressing the risks and assumptions it contains.

VI. OPERATIONAL REQUIREMENTS

To minimize operational risks, the System's Investment Office shall establish the following criteria to support the use of derivatives:

- A. A documented procedure in the operations manual for the involvement of and oversight of derivatives activity by the Senior Investment Officer of the appropriate investment unit.
- B. A risk management function that shall track the aggregation of risk across the various System portfolios, including derivative use.
 - 1. The risk management function shall be separated from the portfolio management function, ensuring proper risk management of derivatives use, counterparty exposure, and exposure to leverage.
 - 2. The risk management function and all derivatives use shall at all times comply with the requirements of any risk audit function which oversees the System's Investment Office.
- C. Sufficient and experienced back office support with sufficient technology and systems for handling confirmations, payment, margin levels, and accounting and reporting of derivative use.
- D. Each special derivative policy shall also have operational procedures that address:
 - 1. Accounting and valuation procedures of derivatives, including mark

to market procedures.

- 2. Reconciliation procedures for cash and margin positions with the master custodian bank.
- 3. Staff duties and responsibilities, including the separation of duties and responsibilities for those authorized to use derivatives.
- 4. Reports concerning violations of the operational procedures of each specific special policy along with the resolution or the recommended remedy or sanction.

VII. EVALUATING NEW DERIVATIVES

Each new derivative application shall be evaluated within a framework consistent with Section V of this policy.

VIII. BENCHMARK

Not applicable.

IX. GLOSSARY OF TERMS

The following Glossary of Terms contains definitions also referenced in the System's Master Glossary of Terms.

Cash Market – The physical market for a deliverable instrument or commodity.

Collateralized Mortgage Obligation (CMO) – A generic term for a security backed by real estate mortgages.

Collateral – Assets pledged to secure payment of a party's obligation under a transaction.

Convertible Bond – A bond that may, at the holder's option, be exchanged for other securities, often common stock.

Counter-Party – The entity which is in the opposing position to a transaction.

Forward Contract – A non-standardized contract for a deliverable commodity or instrument which conveys the obligation to make or take delivery of that commodity or instrument at a future point in time at a specified price.

Futures Contract – A standardized contract for a deliverable commodity or instrument which conveys the obligation to make or take delivery of that commodity or instrument at a future point in time at a specified price.

Leverage – A condition where the net economic exposure of an obligation exceeds the value of the underlying assets which support the obligation.

Margin – Collateral representing a portion of the notional amount of a transaction specified by the exchange clearing the transaction or the counterparty to the transaction.

Mark-to-Market – The valuation of a security or other instrument, transaction, or portfolio of same to current market prices.

Master Agreement – One agreement which covers the terms, conditions and settlement of a number of transactions.

Option – An instrument which conveys the right, but not the obligation to buy or sell a deliverable instrument at a specified price.

Swap – A contract where the parties agree to exchange the cash flows of the underlying assets in amounts and times specified by the contract.